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10/775,817	02/10/2004	David Paul Yach	1578.115 (11428-4-US-PAT)	8167
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Kelly-Krause				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/775,817

Applicant(s)

YACH ET AL.

Examiner

Johnese Johnson

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-12, 14-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-12, 14-18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 13, 2010 has been entered.
2. In response to the Amendment filed on 4-13-2010, claims 1, 3-12, 14-18 and 20 are pending in this application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-12, 14-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Multer et al. (US PG. Pub. No. 2001/0044805) and in view of Cha et al. (US PG. Pub. No. 2002/0116404).

As to claims 1 and 12, Multer et al. disclose:

a first change list creator embodied at the selected one of the network-copy database and mobile-copy database, said first change list creator configured to create a first change list that lists change indicia of each change made to the selected one of the network-copy database and mobile-copy database during a selected time period during which one of the network-copy database and the mobile-copy database are changed (see paragraphs [0111], [0063], lines 39-41 and [0009], [0082], [0086], and [0095]);

a first change-list lock that selectively permits and prohibits changes to the first change list created by said first change list creator and which is identified by said identifier, said first change list lock configured to lock to the first change list, thereby to prohibit changes to the first change list identified by said identifier upon commencement of a synchronization process (see paragraph [0202]; wherein locking is performed before synchronization is initiated) which synchronizes the network, copy database to the mobile copy of the database, the selected time period defined by locking of the first change list by said first change-list lock (see paragraph [0212], lines 1-2; wherein the locks prevent changes during synchronization and paragraph [0224]; wherein locks are initiated so that no changes may be made during synchronization); and
the first change list identification being communicated over a radio air interface separately from the first change list (see paragraph [0006]; wherein the data is communicated wirelessly, i.e., over the air).

However, Multer et al. do not explicitly disclose:

a first change list identifier, embodied at the selected one of the network-copy database and mobile-copy database, said change list identifier providing an identifier to the first change list

creator, said identifier uniquely identifying the first change list that is made by the first change list creator during said selected period;

Cha et al. disclose:

a first change list identifier, embodied at the selected one of the network-copy database and mobile-copy database, said change list identifier providing an identifier to the first change list creator, said identifier uniquely identifying the first change list that is made by the first change list creator during said selected period (see paragraph [0035], lines 1-6).

It would have been obvious, at the time of the invention, having teachings of Multer et al., and Cha et al. before him/her, to combine the features as disclosed by Multer et al. with the features as disclosed by Cha et al. to provide an efficient logging scheme that can be used to recover a transaction processing system after a failure occurs (see Cha et al., paragraph [0014]).

As to claims 3 and 14, Multer et al. do not explicitly disclose:
wherein the identifier comprises a numerical value.

However, Cha et al. disclose:

wherein the identifier comprises a numerical value (see paragraph [0035], line 6).

It would have been obvious, at the time of the invention, having teachings of Multer et al., and Cha et al. before him/her, to combine the features as disclosed by Multer et al. with the features as disclosed by Cha et al. to provide an efficient logging scheme that can be used to recover a transaction processing system after a failure occurs (see Cha et al., paragraph [0014]).

As to claims 4 and 15, Multer et al. do not explicitly disclose:

wherein the numerical value uniquely identifies the first change list

However, Cha et al. disclose:

wherein the numerical value associated by said change list indicator with the first change list uniquely identifies the first change list (see paragraph [0035], lines 1-6) .

It would have been obvious, at the time of the invention, having teachings of Multer et al., and Cha et al. before him/her, to combine the features as disclosed by Multer et al. with the features as disclosed by Cha et al. to provide an efficient logging scheme that can be used to recover a transaction processing system after a failure occurs (see Cha et al., paragraph [0014]).

As to claims 5 and 16, Multer et al. do not explicitly disclose:

further comprising a register for storing (“for storing” which is interpreted as intended use in light of MPEP 2106 [II-C] and should be changed to “to storing”) a prior-associated value previously associated with a previously-generated change list formed prior to a prior synchronization session, and wherein the numerical value used by said change list indicator is incrementally related to the prior-associated value.

However, Cha et al. disclose:

further comprising a register for storing (“for storing” which is interpreted as intended use in light of MPEP 2106 [II-C] and should be changed to “to storing”) a prior-associated value previously associated with a previously-generated change list formed prior to a prior

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synchronization session, and wherein the numerical value used by said change list indicator is incrementally related to the prior-associated value (see paragraph [0035], line 6 and [0051], lines 12-16).

It would have been obvious, at the time of the invention, having teachings of Multer et al., and Cha et al. before him/her, to combine the features as disclosed by Multer et al. with the features as disclosed by Cha et al. to provide an efficient logging scheme that can be used to recover a transaction processing system after a failure occurs (see Cha et al., paragraph [0014]).

As to claims 6 and 17, Multer et al. do not explicitly disclose:

wherein said change list identifier increments the prior-associated value by an integer value to form the identification value.

However, Cha et al. disclose:

wherein said change list identifier increments the prior-associated value by an integer value to form the identification value (see paragraph [0057]).

It would have been obvious, at the time of the invention, having teachings of Multer et al., and Cha et al. before him/her, to combine the features as disclosed by Multer et al. with the features as disclosed by Cha et al. to provide an efficient logging scheme that can be used to recover a transaction processing system after a failure occurs (see Cha et al., paragraph [0014]).

As to claims 7 and 18, Multer et al., as modified, disclose:

wherein a database synchronization session commences and said first change-list lock locks the first change list when selection is made to send the first change list between the mobile node and the network part (see Multer et al. paragraphs [0009] – database sync., [0212], line 2, and [0020] 6-7; wherein the selected log is received).

As to claim 8, Multer et al., as modified, disclose:

wherein session state information is communicated between the mobile node and the network part upon commencement of a database synchronization session and wherein the identification formed by said change list identifier forms part of the session state information (see Multer et al., paragraph [0212], lines 1-2; wherein the session state information discloses identifies which log is locked and/ or being updated).

As to claims 9 and 20, Multer et al., as modified, disclose:

wherein, once locked by said first change-list lock, the first change list created by said first change list creator remains locked while at least one change indicia is contained in the first change list (see Multer et al., paragraph [0212], lines 2-3- locked during continuation of synchronization).

As to claim 10, Multer et al. disclose:

wherein the change indicia contained in the first change list created by said change list creator comprises new-record indicia representative of at least a first record added to the selected one of

the network-copy database and mobile-copy database (see Multer et al., paragraph [0124], lines 11-13).

As to claim 11, Multer et al. disclose:

wherein the change indicia contained in the first change list created by said change list creator comprises altered record indicia representative of at least a first change (see Multer et al., paragraph [0046]).

Response to Arguments

5. Applicant's arguments filed 4-13-2010 have been fully considered but they are not persuasive.

Applicant's arguments that the combination of Multer and Cha do not disclose all of the limitations of claims 1 and 12, are acknowledged but are not deemed persuasive.

According to the examiner's interpretation, what is being claimed in claims 1 and 12 is that a change list is created to indicate changes made, during a particular time frame, at one of a local or remote database. The change list has an identifier. What is also being claimed is a lock for concurrency control during synchronization between the remote and local copies. Based on this interpretation, Multer and Cha disclose this:

a first change list creator embodied at the selected one of the network-copy database and mobile-copy database, said first change list creator configured to create a first change list that lists change indicia of each change made to the selected one of the network-copy database and

mobile-copy database during a selected time period during which one of the network-copy database and the mobile-copy database are changed (see paragraphs [0111], [0063], lines 39-41 and [0009], [0082], [0086], and [0095]; wherein "Change Log (CL) (or differencing information), a data file which contains a series of synchronization transactions."; "For example, a large web portal such as Yahoo! and Snap.com provide services such as free e-mail and contact storage to their users. A user may wish to synchronize this with applications running on their cellular phone, PDA, or Windows devices.");

a first change-list lock that selectively permits and prohibits changes to the first change list created by said first change list creator and which is identified by said identifier, said first change list lock configured to lock to the first change list, thereby to prohibit changes to the first change list identified by said identifier upon commencement of a synchronization process (see paragraph [0202]; wherein locking is performed before synchronization is initiated) which synchronizes the network, copy database to the mobile copy of the database, the selected time period defined by locking of the first change list by said first change-list lock (see paragraph [0212], lines 1-2; wherein the locks prevent changes during synchronization and paragraph [0224]; wherein locks are initiated so that no changes may be made during synchronization);
and

the first change list identification being communicated over a radio air interface separately from the first change list (see paragraph [0006]; wherein the data is communicated wirelessly, i.e., over the air).

However, Multer et al. do not explicitly disclose:

a first change list identifier, embodied at the selected one of the network-copy database and mobile-copy database, said change list identifier providing an identifier to the first change list creator, said identifier uniquely identifying the first change list that is made by the first change list creator during said selected period;

Cha et al. disclose:

a first change list identifier, embodied at the selected one of the network-copy database and mobile-copy database, said change list identifier providing an identifier to the first change list creator, said identifier uniquely identifying the first change list that is made by the first change list creator during said selected period (see paragraph [0035], lines 1-6; wherein "An update log record used to store changes in the database comprises of a log header and a log body. FIG. 4 shows a variety of fields in the log header according to a preferred embodiment. The "LSN (Log Sequence Number)" field stores the identity of the current log record by preferably storing the physical address of log record on disk.").

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one

of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, *It would have been obvious, at the time of the invention, having teachings of Multer et al., and Cha et al. before him/her, to combine the features as disclosed by Multer et al. with the features as disclosed by Cha et al. to provide an efficient logging scheme that can be used to recover a transaction processing system after a failure occurs (see Cha et al., paragraph [0014]).*

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnese Johnson whose telephone number is 571-270-1097. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. J./
Examiner, Art Unit 2166

JJ
July 15, 2010

/Khanh B. Pham/
Primary Examiner, Art Unit 2166